

MANUFACTURING

NUMBERS:

9100210
9100212
9100218
9100220
9100222
9100224
9100230



Antunes Foodservice Equipment
DIVISION OF A.J. ANTUNES & CO.



P/N 1010649 Rev. E 03/07

roundup
VARIETY STEAMER
Models VS-200ASB & ADB



Owner's Manual

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OWNER INFORMATION

General

The Variety Steamer produces steam using plain tap water for quick heating and reconstituting of food items. Simple push button action delivers an impulse of steam. Because the amount of steam is consistent, it removes the guesswork and produces a uniform finished product from one operator to the next.

This manual provides the safety, installation and operating procedures for the Variety Steamer. We recommend that all information contained in this manual be read prior to installing and operating the unit.

Your Variety Steamer is manufactured from the finest materials available and is assembled to Roundup's strict quality standards. This unit has been tested at the factory to ensure dependable trouble-free operation.

Warranty Information

Please read the full text of the Limited Warranty in this manual.

If the unit arrives damaged, contact the carrier immediately and file a damage claim with them. Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and **are not** covered under warranty.

The warranty **does not** extend to:

- Damages caused in shipment or damage as result of improper use.
- Installation of electrical service.
- Normal maintenance as outlined in this manual.
- Malfunction resulting from improper maintenance.
- Damage caused by abuse or careless handling.
- Damage from moisture into electrical components
- Damage from tampering with, removal of, or changing any preset control or safety device.

IMPORTANT! Keep these instructions for future reference. If the unit changes ownership, be sure this manual accompanies the equipment.

OWNER INFORMATION (continued)**Service/Technical Assistance**

If you experience any problems with the installation or operation of your unit, contact your local Roundup Authorized Service Agency. They can be found in the service agency directory packaged with the equipment.

Fill in the information below and have it handy when calling your authorized service agency for assistance. The serial number is on the specification plate located on the rear of the unit.

Purchased From: _____

Date of Purchase: _____

Model No.: _____

Serial No.: _____

Mfg. No.: _____

Refer to the service agency directory and fill in the information below:

Authorized Service Agency

Name: _____

Phone No.: _____

Address: _____

Use only genuine Roundup replacement parts in this unit. Use of replacement parts other than those supplied by the manufacturer will void the warranty. Your Authorized Service Agency has been factory trained and has a complete supply of parts for this unit.

You may also contact the factory at **1-877-392-7854** or **1-630-784-1000 (outside the U.S and Canada)** if you have trouble locating your local authorized service agency.

Model Designation**VS-200AXX**

┌┐ SB = Single Basket 20 oz.
DB = Dual Basket 10 oz. each

IMPORTANT SAFETY INFORMATION

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the Variety Steamer.

WARNING

GENERAL WARNING. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

WARNING

ELECTRICAL WARNING. Indicates information relating to possible shock hazard. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

CAUTION

GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.

WARNING

HOT SURFACE WARNING. Indicates information important to the handling of equipment and parts. Failure to observe caution could result in personal injury.

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.

- Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.
- Install or locate the equipment only for its intended use as described in this manual. Do not use corrosive chemicals in this equipment.
- Do not operate this equipment if it has a damaged cord or plug; if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact the nearest Roundup authorized service facility for adjustment or repair.
- Do not block or cover any openings on the unit.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.

The following warnings and cautions appear throughout this manual and should be carefully observed.

- Turn the unit off, disconnect the power source and allow unit to cool down before performing any service or maintenance on the unit.
- The procedures in this chapter may include the use of chemical products. These chemical products will be highlighted with bold face letters followed by the abbreviated HCS (Hazard Communication Standard). See Hazard Communication Standard manual for the appropriate Material Safety Data Sheets (MSDS).
- The equipment should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines, protected by fuses or circuit breaker of the proper rating.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.

IMPORTANT SAFETY INFORMATION (continued)

- **WARNING ELECTRICAL SHOCK HAZARD.**
FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.
- The unit should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines, protected by fuses or circuit breaker of the proper rating.

- This equipment is to be installed to comply with the basic plumbing code of the Building Officials and Code Administrators, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).
- Water pressure must not exceed 30 psi (2.1 kg/cm² or 207 kPa). Higher water pressures may cause poor performance or flooding. To reduce water pressure, install a water pressure regulator and set water pressure between 20-25 psi (1.4 - 1.7 kg/cm² or 138 - 172 kPa). To order a water pressure regulator from your authorized service center, order Roundup part no. 7000314.
- Do not clean this appliance with a water jet.

- Do not use a sanitizing solution or abrasive materials. The use of these may cause damage to the stainless steel finish.
- To ensure proper steaming characteristics, some mineral deposits must be present on generator casting. If, during cleaning, the casting does become free of mineral deposits, add plain tap water to casting and allow it boil off. This will ensure proper steaming characteristics by creating a thin layer of mineral deposits on the casting.

⚠ CAUTION ⚠

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

⚠ WARNING ⚠

ELECTRICAL SHOCK HAZARD.

FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.

SPECIFICATIONS

Electrical Ratings at Listed Supply Voltages

Model & Mfg. No.	Voltage	Watts	Amps	Hertz
VS-200ASB 9100210	208-240	3800	18.3-15.8	50/60
VS-200ASB 9100212	230	3490	15.2	50/60
VS-200ADB 9100218	240	3000	12.5	50/60
VS-200ADB 9100220	208-240	3800	18.3-15.8	50/60
VS-200ADB 9100222	230	3490	15.2	50/60
VS-200ADB 9100224	240	3800	15.8	50/60
VS-200A 9100230	208-240	3800	18.3-15.8	50/60

Electrical Cord & Plug Configurations

Model & Mfg. No.	Description	Configuration
VS-200ASB 9100212& 9100222	CEE 7/7, 16 Amp., 250 VAC (Assembly Only).	
VS-200ADB 9100224	IEC-309, 16 Amp., 250 VAC., Pin & Sleeve Assembly Only).	
VS-200ADB 9100210, 9100220 VS-200A, 9100230	NEMA 6-20P, 20 Amp., 250 VAC., Non – Locking (Assembly Only).	
VS-200ADB 9100218	UK BS 1363 13 Amp., 250 VAC.	

Capacities

VS-200ADB

- 10 oz. of frozen or thawed product in each of two baskets. Note: Pastas must be precooked.

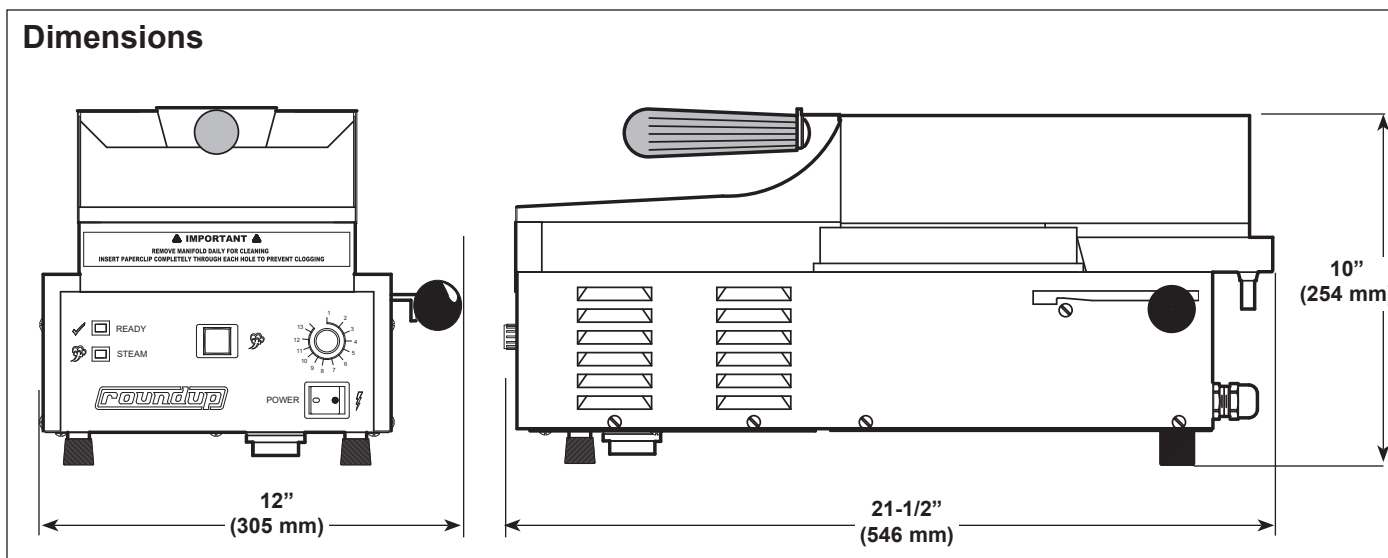
VS-200ASB

- 20 oz. of frozen or thawed product in one basket. Note: Pastas must be precooked.

Shipping Weight

- 42 lbs. (19 kg)

Dimensions



INSTALLATION

Unpacking

1. Remove unit and all packing materials from shipping carton.
2. The unit should ship with:
 - Variety Steamer
 - Owner's Manual
 - Authorized Service Agency Directory
 - Petro Gel Lubricant
 - Water Inlet Hose Assembly
 - Black Drain Tubing

NOTE: If any parts are missing or damaged, contact Antunes Technical Service IMMEDIATELY at 1-877 392-7854 or 630-784-1000 in the U.S. and Canada.

3. Remove all packing materials and protective coverings from the unit.
4. Remove and wash all removable parts (baskets, top housing, drip tray) in soap and water. Rinse with clean hot water and allow to air dry.
5. Wipe all surfaces of the unit with a hot damp cloth. **Do NOT use a dripping wet cloth. Wring out before use.**
6. Re-install all removed parts.

Equipment Setup

GENERAL

When placing the unit into service, pay attention to the following guidelines:

- Make sure power to the unit is off and the unit is at room temperature.
- Do not block or cover any openings on the unit.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.
- Raise the front legs so the unit is tilted slightly to the rear (Figure 2).

ELECTRICAL

1. Place the unit on a sturdy, level table or other work surface. Turn off the Rocker Switch before proceeding.
2. Ensure that the line voltage corresponds to the stated voltage on the units specification label and power cord warning tag. Plug in the power cord.

⚠ CAUTION ⚠

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

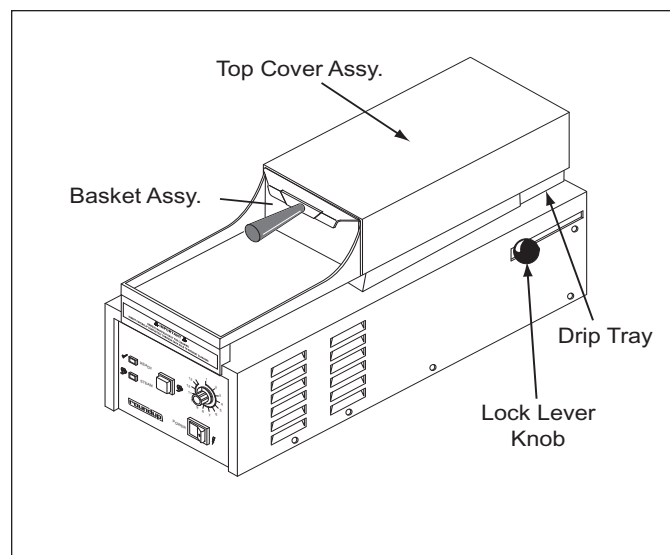


Figure 1. Variety Steamer

INSTALLATION (continued)

⚠ WARNING ⚠

BE SURE TO FOLLOW ALL GUIDELINES, PROCEDURES, AND PRECAUTIONS LISTED IN THE IMPORTANT SAFETY INFORMATION SECTION OF THIS MANUAL.

PLUMBING

⚠ CAUTION ⚠

This equipment is to be installed to comply with the basic plumbing code of the Building Officials and Code Administrators, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

NOTE: Variety Steamer models are designed to use cold tap water.

This unit requires a direct water hookup. A Water Inlet Hose and Strainer Assembly (Figure 2) are supplied.

1. Turn off the water valve (not supplied) that provides water to the unit (Figure 2).
2. Connect the 1/4" (6.5 mm) I.D. flexible tubing to the outlet side of the Water Pressure Regulator and secure with the Worm Clamp as shown in Figure 2.

NOTE: A Water Pressure Regulator (P/N 7000314) must first be installed as shown in Figure 2. Failure to do so will result in poor steaming and possible flooding.

3. Turn water valve on.

4. While holding over a bucket, press and hold the "white" plastic tip on the Quick Disconnect insert until good, steady water flow is noted. **This will purge all air out of the line.** Release and note the pressure on the Water Pressure Regulator Gauge. It should read 20 PSI. If it reads more or less, adjust the pressure by pulling the black knob upwards and turning it clockwise to increase (counter clockwise to decrease) the water pressure. Push the knob down to lock it in place.

NOTE: When adjusting the knob, you must relieve the existing pressure by pressing the "White" plastic tip on the Quick Disconnect insert for 3 seconds. The gauge will now show the new pressure setting.

5. Push the Quick Disconnect insert into the fitting at the rear of the unit until it "clicks." (Figure 2).

NOTE: Incoming water is controlled by a solenoid valve inside the electrical housing of the steamer.

6. Connect the black drain hose to the drip tray as shown in Figure 2. Place the other end of the drain hose in a drain or collection pan.

⚠ CAUTION ⚠

Water pressure must not exceed 30 psi (2.1 kg/cm² or 207 kPa). Higher water pressures may cause poor performance or flooding. To reduce water pressure, install a water pressure regulator, and set water pressure between 20-25 psi (1.4 - 1.7 kg/cm² or 138 - 172 kPa). To order a water pressure regulator from your authorized service center, order Roundup part no. 7000314.

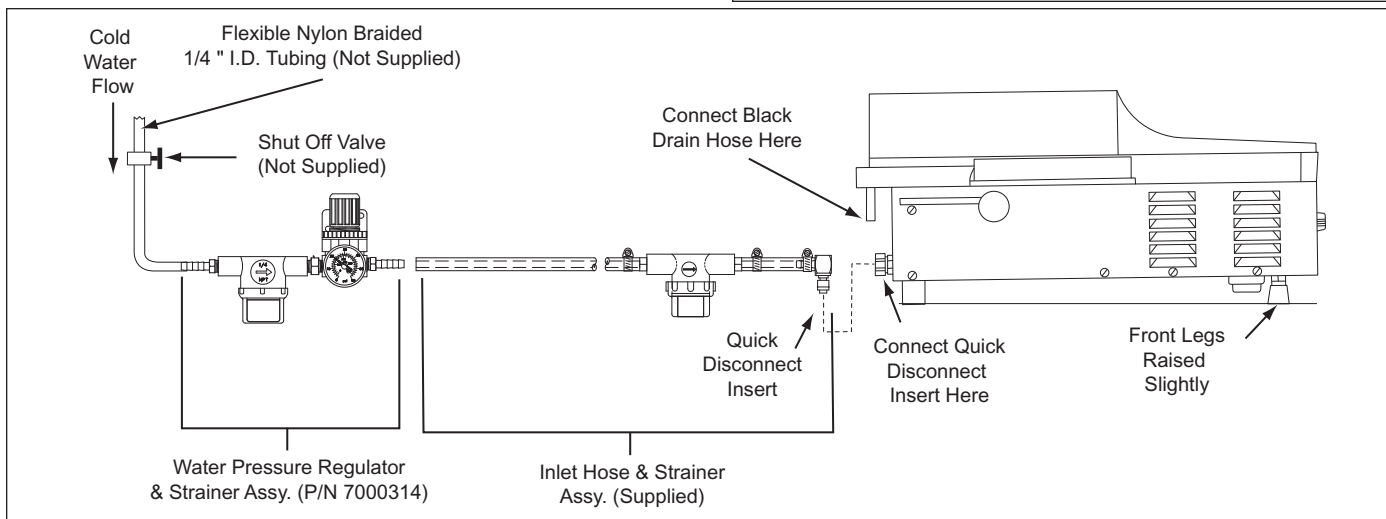


Figure 2. Connecting Water Supply

STEAMING GUIDE

The Variety Steamer makes it possible to expand a menu with just one piece of equipment. The Variety Steamer produces a super-heated dry steam. This steam penetrates the product until the product's temperature matches the steam temperature. The guide below is an approximation of the number of steam shots and the time required to cook the food item. Steam times may vary based on the state and quantity of the food product.

PRODUCT DESCRIPTION	DIAL SETTING	TIME	PRODUCT DESCRIPTION	DIAL SETTING	TIME
<i>PreCooked Items</i>	<i>VS-200</i>	<i>VS-350</i>	<i>Frozen Items</i>	<i>VS-200</i>	<i>VS-350</i>
Spaghetti	3	25 seconds	Mixed Vegetables	6	55 seconds
Rice	3	25 seconds	Spaghetti	6	55 seconds
Egg Noodles	3	25 seconds	Ravioli	12	1 minute, 55 seconds
Macaroni	3	25 seconds	Tortellini	12	1 minute, 55 seconds
Ravioli	6	55 seconds	<i>Other</i>		
Tortellini	6	55 seconds	Poached Eggs	18	2 minutes, 45 seconds
Roast Beef, Sliced	2	15 seconds	Bread Products	1-2	5-15 seconds
Shrimp	4	35 seconds			
Tortilla Shell	1	5 seconds			
<i>Fresh Items</i>					
Shrimp	8	1 minute, 15 seconds			
Broccoli	10	1 minute, 35 seconds			

Products starting temperature is from a refrigerated state unless otherwise stated.
This is also based on a full 20 ounce basket or two individual 10 ounce baskets.

OPERATION

Operator Controls

ROCKER SWITCH (POWER ON/OFF)

When the Rocker Switch is in the ON position, the control board is activated and the green light on the front panel lights up. A thermostat senses generator temperature. If the generator temperature is below 350° F (176° C), power is applied to the generator until setpoint is reached. The generator is constantly monitored and power is regulated to maintain temperature setpoint of 380° F (193° C).

YELLOW AND GREEN LIGHTS

The green light comes on when the Rocker Switch (Power On/Off) is turned on. The green light is not lit during the steaming cycle.

The yellow light comes on during the steaming cycle. When the steaming cycle is complete, the yellow light turns off, and an audio alarm sounds for 3 seconds.

CONTROL KNOB

The control knob setting determines the length of the steaming cycle. Each number on the panel behind the knob represents a ten second interval (1=10 sec; 2=20 sec; 3=30 sec; etc.) up to 130 seconds.

Example: During the steaming cycle, with the control knob set to 3, the solenoid valve opens once every 10 seconds, applying 3 total shots of water that is converted immediately into steam for the product.

NOTE: Each shot of steam is approximately 3/4 oz. (25 milliliters) of water.

OPERATE SWITCH

When the operate button is pressed and released, Line Voltage is supplied to the solenoid valve, the solenoid valve opens, and water sprays onto the heated steam generator. The water flashes immediately into live steam and is forced up through the Black Manifold Plate orifices.

LOCK LEVER

When in the full forward (towards operator) position, the lock lever secures the Black Manifold Plate onto the Steam Generator. Moving the lock lever to the full rearward position unlocks the Black Manifold Plate, allowing it to be removed for cleaning or servicing.

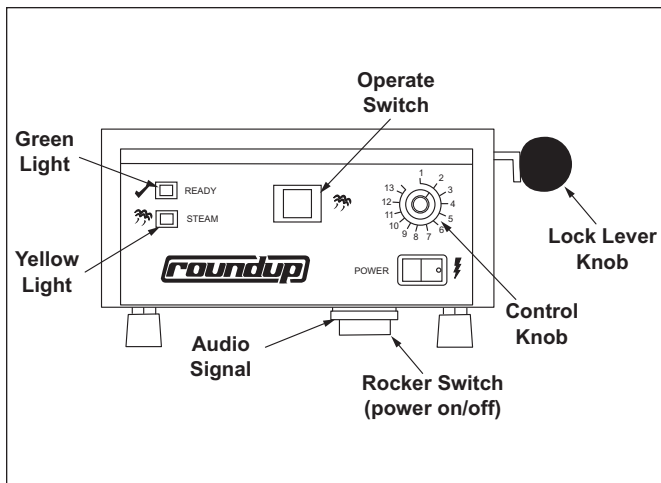


Figure 3. Operating Controls

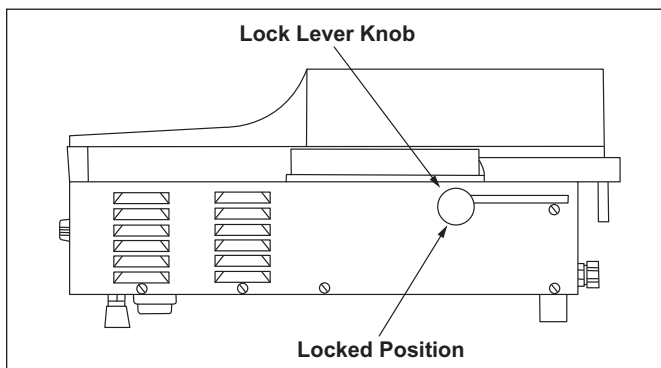


Figure 4. Lock Lever

HI-LIMIT THERMOSTAT

If the generator should overheat for any reason, the Hi-Limit thermostat opens (trips) and cuts off power to the generator. To reset this Hi-Limit, turn the unit off, unplug the power cord, disconnect the rear water line quick disconnect insert, and allow the unit to cool for 45 minutes. Place unit upside down and remove the four (4) Control Panel screws (Figure 4). Carefully lift the Control Panel upward and lay it on its side. Fully press the red Hi-Limit Reset Button. Reassemble the unit. If the Hi-Limit requires continuous resetting, contact your Authorized Service Agency.

OPERATION (continued)**Operating Instructions**

1. Turn the Rocker Switch (Power On/Off) to ON.
2. Allow the unit to preheat for approximately 20-30 minutes.

NOTE: The green ready light will be on when the unit is warming up.

NOTE: Do not push the operate button during warm-up.

3. Rotate the Control Knob to position 3.
4. Press and release the operate switch. The green ready light will go out and the yellow light will be on indicating steaming is occurring.

NOTE: Allowing this first steaming cycle to finish will purge air from the water line and ensure proper operation.

5. Place product into the basket(s) and insert basket(s) into top housing.
6. Turn the control knob to the desired timing cycle and press the operate switch.

NOTE: Experiment by steaming product at different settings until correct cycle for that product is found.

7. When the audio alarm sounds, remove and empty the basket(s).

⚠ WARNING ⚠

To avoid injury, be careful when pulling basket assembly out from unit. Be sure to allow steam to escape before putting hands or face over the steamer.

8. At the end of the serving day or shift, turn off the Rocker Switch and allow the unit to cool before performing the procedures under "Daily

Maintenance" in the Maintenance section of this manual..

Steaming Tips

- Pre-cooked pasta is easily reconstituted, and gives you a hot product without the wetness of the normal "dip" method.
- Experiment with your products and different steaming times—a little more or less steam could change the appearance/flavor.
- If you serve melted cheese on sandwiches, steam is the perfect way to melt cheese.
- A steamed bun (which takes about 10-15 seconds) says "Hot Sandwich" to your customer.
- Vegetables, rice and bread products can be reconstituted by steaming before serving which reduces waste.
- Dinner rolls, muffins, even tortillas can be heated completely and held without drying out the product.
- Use a low plate or pan when steaming to allow full steam penetration and shorter cooking times.
- Condensation inside the steamer is normal, but excess moisture indicates too much water is being used.
- Heat meat and bread products apart from each other, then combine in a sandwich. This will keep the meat juices from soaking the bread.
- Finish off a special meal with a steamed hand towel—hot without excess moisture.

MAINTENANCE

⚠ WARNING ⚠

Turn the unit off, disconnect the power source and allow the unit to cool down before performing any service or maintenance on the unit.

⚠ CAUTION ⚠

Chlorides or phosphates in cleaning agents such as bleach, sanitizers, degreasers, or detergents could cause permanent damage to the stainless steel equipment. The damage is usually in the form of discoloration, dulling of metal surface finish, pits, voids, holes, or cracks. This damage is permanent and is not covered by warranty. The following tips are recommended for maintenance of your stainless steel equipment:

- Always use a soft, damp cloth for cleaning, rinse with clear water, and wipe dry. When required, always rub in the direction of the metal polish lines.
- Routine cleaning should be done daily using soap, ammonia detergent, and water.
- Stains and spots should be sponged using a vinegar solution.
- Finger marks and smears should be removed using soap and water.
- Hard water spots should be sponged using a vinegar solution.

Maintenance Schedule

NOTE: Frequency of cleaning is determined by water conditions, usage and water filter systems.

⚠ CAUTION ⚠

Do not use a sanitizing solution or abrasive materials. The use of these may cause damage to the stainless steel finish.

⚠ CAUTION ⚠

If a chemical cleaner is used, be sure it is safe to use on cast aluminum. Observe all precautions and warnings on product label.

⚠ CAUTION ⚠

Unplug power cord before moving and servicing this appliance.

⚠ CAUTION ⚠

Failure to regularly and/or properly clean this equipment may damage it or cause the user bodily injury

DAILY CLEANING

1. Turn the Rocker Switch (Power On/Off) to OFF. Unplug the power cord and allow the unit to cool down before proceeding.
2. Check the rear water quick disconnect fitting and all hose clamp connections for leakage. If leakage is apparent, tighten all clamps or replace part(s) if necessary.
3. Remove the basket(s), top cover housing assembly, and the drip tray, wash them in hot soapy water, rinse and allow to air dry.
4. Remove the Black Manifold Plate by slightly lifting and sliding the Locking Lever (on the right side of the unit) towards the rear, carefully remove the plate and remove the large black O-ring from the plate. Remove the diffuser plate, remove the spray tube by carefully lifting the loose end and gently twisting and pulling it out of the steam generator hole. **Take a suitable 1/16" punching tool (such as a large paperclip) and fully insert it through all 12 orifices in the black manifold as well as through the six orifices in the spray tube.** This will assure that the orifices are not obstructed with debris. Wash all items in hot soapy water, rinse, and allow them to air dry.
5. Reinstall the spray tube into the steam generator hole and reinstall the diffuser plate.
6. Lightly apply some Petro Gel (supplied) onto the large black O-ring and reinstall the O-ring onto the manifold plate (this will allow the manifold plate to seat easily onto the steam generator). Hold the manifold plate up to a light and verify that light is visible through all of the orifices. If so, seat the manifold fully onto the generator and pull the locking lever forward to lock the plate.
7. Check that the Water Pressure Regulator is correctly set at 20-25 PSI (1.4 to 1.7 kg/cm² or 138-172 kPa.)
8. Reinstall all parts and accessories. Plug power cord into electrical outlet.

MAINTENANCE (continued)

MONTHLY CLEANING

Your steamer utilizes an open steam generator. Water sprayed onto the generator surface flashes into steam immediately, but the minerals in the water do not steam; they stay on the generator surface. **A small amount of calcium/mineral deposits are needed for proper operation**, but a build-up of excessive calcium/mineral deposits causes poor steaming efficiency, excessive moisture (wet steam), and will eventually retard the steaming action completely.

1. Turn the Rocker Switch (Power On\Off) to OFF. Unplug the power cord and allow the unit to cool down before proceeding.
2. Perform the steps under Daily Cleaning, but DO NOT reassemble the unit.
3. With the unit cool, use a NON-ABRASIVE brass wire brush and/or scraper to loosen and remove the excessive calcium/mineral deposits from the generator surface (Figure 5). Wipe the generator with a clean, damp cloth and reassemble the unit.

NOTE: If the deposits are still excessive and/or difficult to remove, see Steps 4 through 10.

4. Pour delimer solution (not supplied) onto the generator surface. Be sure to follow the delimer manufacturer's instructions for proper mixture and use.

CAUTION

If a chemical cleaner/delimer is used, be sure it is safe to use on cast aluminum. Observe all precautions and warnings on the product label.

5. Using a sponge or dry towel, remove the delimer solution from the generator surface, then rinse with clear water.

NOTE: To ensure proper steaming characteristics, some calcium/mineral deposits must be present on the generator surface. If during cleaning, the surface becomes free of calcium/mineral deposits, add plain tap water to the surface and allow it to boil off. If necessary, repeat this several times in order to formulate a thin coating of calcium/mineral deposits.

NOTE: In soft water areas, it may be necessary to add a small amount of lime to the generator surface to "season" it. This will ensure proper steaming characteristics by formulating a thin coating of calcium/mineral deposits on the generator surface. Seasoning mixture consists of 3/4 ounce (25ml/25cc) of baking soda, 3/4 ounce (25 ml/25cc) of lime, and 1 quart (950ml/950cc) of water. Stir mixture and pour 1/4" deep onto hot generator surface. After mixture is converted to steam, the remaining loose powder can be removed.

6. Plug the power cord into the appropriate outlet.
7. Turn the Rocker Switch (Power On/Off) to ON and allow the unit to warm up for 30 minutes.
8. Set the Control Knob to "3" and push the Operate Button to run a 30 second cycle of steam. **This will purge any remaining delimer residue from the generator surface.**
9. Turn the Rocker Switch (Power On/Off) to OFF.
10. Reinstall all parts and accessories.

MAINTENANCE (continued)

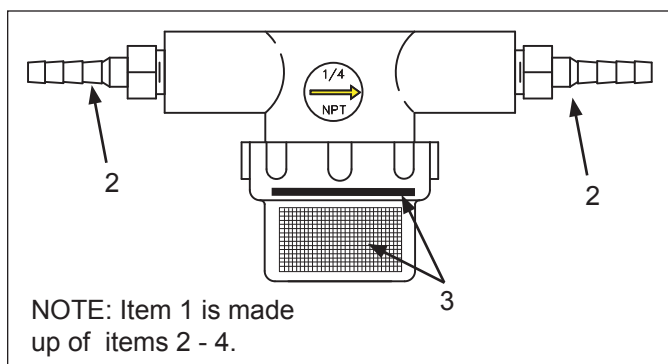
CHECKING AND CLEANING THE WATER STRAINER

The Water Strainer protects your equipment from any foreign debris in the water line that could get into the food, damage the unit's solenoid (causing the unit to leak or flood) and protect from interference with the equipment's proper and consistent operation

To ensure proper and consistent steaming results, visually check the water pressure regulator gauge and strainer cup regularly. If the pressure on the gauge has dropped, visually check the clear, plastic strainer "cup" and clean out the accumulated debris as follows.

1. Shut off the water supply valve to the unit, unscrew the clear, plastic strainer "cup" and carefully remove the mesh strainer screen.

2. At the sink, gently flush all of the accumulated debris from the strainer cup and mesh strainer. Be especially careful not to damage the mesh strainer screen.
3. Carefully place the mesh strainer screen into its seat at the bottom of the clear, plastic cup and confirm that the orange O-ring is properly seated in its place before screwing the strainer cup and top back together.
4. Purge the air out of the strainer and tubing by disconnecting the male quick disconnect insert from the equipment and, over a bucket, push the "white" plastic tip in until there is good water flow.
5. Replace damaged or worn parts as needed.
6. Verify that the Water Pressure Regulator is set to 20-25 PSI (1.4-1.7 kg/cm² or 138-175 kPa).



Item	Part No.	Description	Qty.
1	7000333	Water Line Strainer Kit	1
2	2040130	Male Adapter, barbed - 1/4"	2
3	7000334	Replacement Screen and O-ring Kit	1
4	2110104	Clamp, Worm (Not shown)	2

MAINTENANCE (continued)

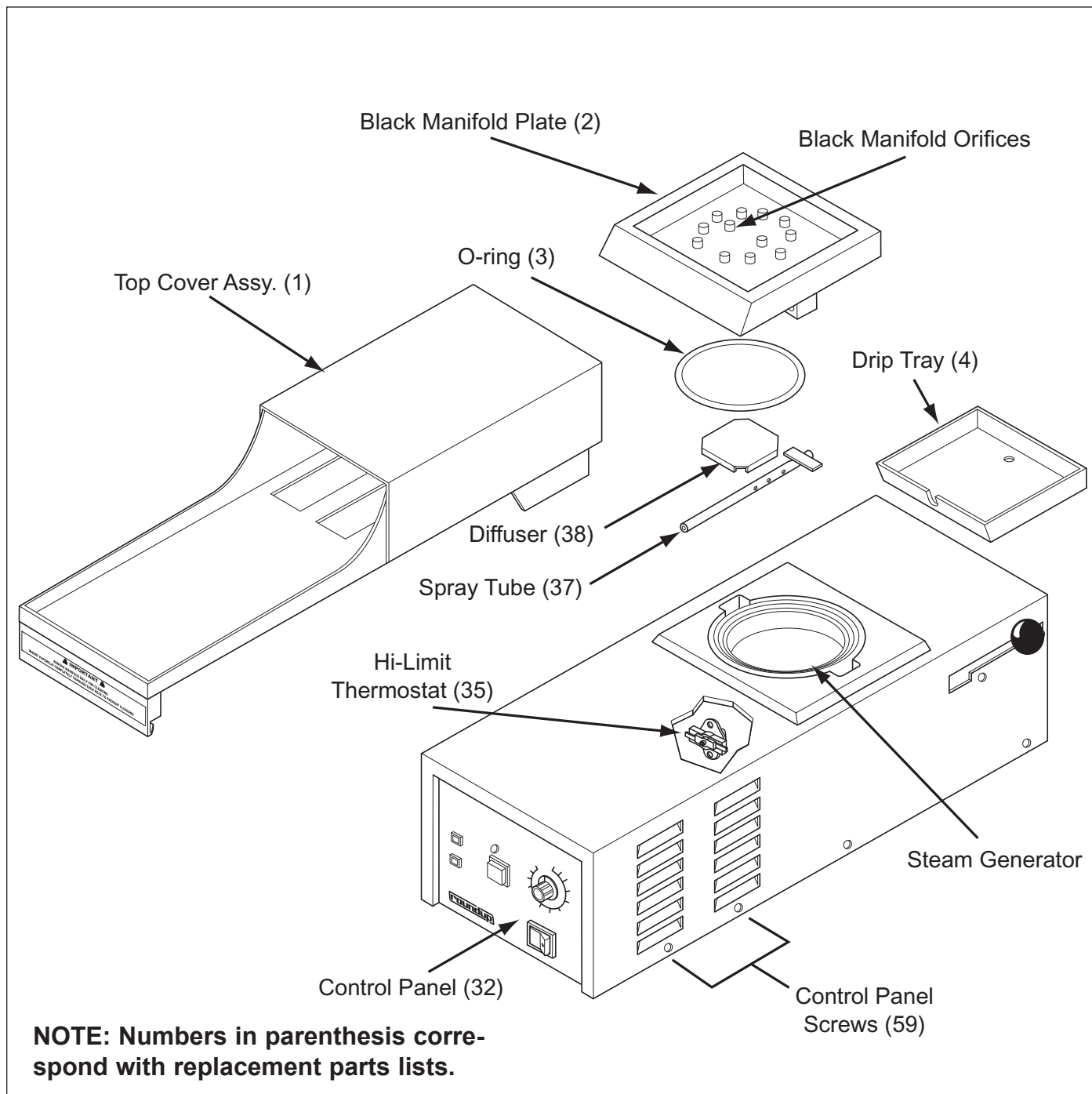


Figure 5. Variety Steamer Components

TROUBLESHOOTING

⚠ WARNING ⚠

To avoid possible personal injury and/or damage to the unit, inspection, test and repair of electrical equipment should be performed by qualified service personnel. The unit should be unplugged when servicing, except when electrical tests are required. Use extreme care during electrical circuit tests. Live circuits will be exposed.

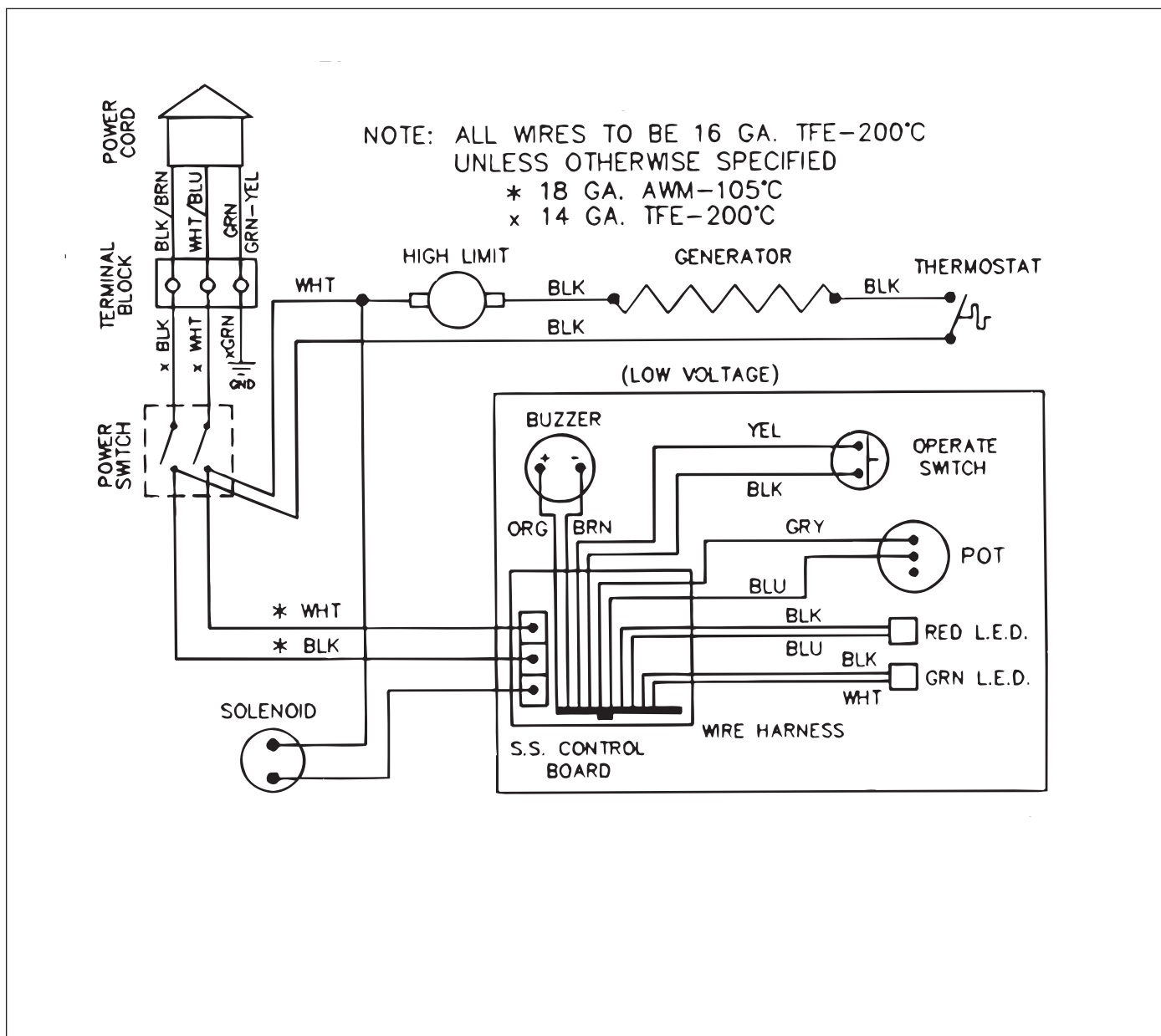
Problem	Possible Cause	Corrective Action
Power On/Off switch is turned on, but the Switch Indicator Light is still off and the unit is not heating up.	The power cord is not correctly plugged in.	Plug the power cord in correctly.
	The power cord and/or electrical plug is damaged.	Inspect electrical wire, plug, and receptacle.
	The main electrical panel circuit breaker is off, or has been tripped.	Reset circuit breaker. Contact your maintenance person or Authorized Service Agency if it trips again.
	Switch is inoperable.	Contact your maintenance person or Authorized Service Agency for service.
The unit's main electrical panel circuit breaker trips.	Damaged receptacle, plug, or cord; a loose connection or an internal component failure.	Turn the unit off, allow it to cool to room temperature, and then restart the unit. Contact your maintenance person or Authorized Service Agency if condition repeats.
Power On/Off switch is turned on, the switch indicator light is on, but the unit is not heating up.	Hi-Limit thermostat is tripped.	Reset the Hi-Limit according to the Operation section of this manual. If it requires continuous resetting or repair, contact your maintenance person or Authorized Service Agency for service.
	Inoperable Thermostat.	
	Inoperable Generator.	
	Loose/burnt wiring.	
Unit heats but there is little or no steam produced and/or The product requires more steaming than usual.	Water Line valve is closed.	Check that the Water Line Valve is open.
	Filter Strainer is restricted.	Check and clean the Filter Strainer as described in the Maintenance section of this manual.
	Quick Disconnect is not fully engaged at rear of unit or is damaged.	Remove and re-engage the Quick Disconnect Insert firmly until a "click" is heard. Replace if damaged.
	Low or no water pressure in water line.	Remove the Quick Disconnect Insert from the rear of the unit. While holding over a bucket, press the "white" plastic tip. Strong Water flow should be noted. If so, reconnect firmly into unit. If
	Spray Tube is restricted.	Remove and clean the Spray Tube according to the Daily Maintenance procedures found in this manual.
	Black Manifold orifices are restricted.	Remove and clean the Black Manifold according to the Daily Maintenance procedures found in this manual.
	Unit is not being cleaned daily and/or properly.	Clean unit Daily according to the Daily maintenance procedures found in this manual.
	Improper water pressure to unit.	Verify that a Water Pressure Regulator is installed and set to 20-25 PSI.

TROUBLESHOOTING (continued)

Problem	Possible Cause	Corrective Action
Unit heats but there is little or no steam produced and/or The product requires more steaming than usual. (Continued)	Insufficient or excessive calcium/mineral buildup on generator surface.	Verify that a thin layer of calcium/mineral deposits is present on the Generator surface. Refer to the Maintenance section of this manual.
	Black Manifold O-ring is worn, damaged, or missing.	Replace the Black Manifold O-ring if worn, damaged, or missing.
	Low Generator temperature.	Verify Generator surface temperature is at least 380° F (193° C),
Steam leaks out of the sides of the unit.	Black Manifold O-ring is damaged or missing.	Replace the Black Manifold O-ring if worn, damaged, or missing.
Black Manifold is difficult to remove or re-install onto the Generator.	Black Manifold not being removed and cleaned daily as required.	Remove and Clean the Black Manifold Daily according to the Maintenance section of this manual.
	Black Manifold O-ring is damaged or worn.	Replace the Black Manifold O-ring if damaged or worn.
	Black Manifold O-ring is not being lubricated daily with Petro Gel.	Lubricate the Black Manifold O-ring daily according to the Maintenance section of this manual.
Unit floods over night and/or continues to steam even when just in ready mode.	Solenoid valve is being held open by debris from the building's water line piping.	Attempt to flush the debris out of the valve by operating the unit on a number of cycles and then letting it rest. If the unit still leaks, contact your maintenance person or Authorized Service Agency.
	There is no pre-strainer/filter on the water line just before the unit.	

WIRING DIAGRAM

Pictorial Wiring Diagram



This exploded view diagram illustrates the assembly of a medical device, likely a patient warming unit. The components are numbered 1 through 74. The main unit (1) features a control panel (36) and a heating element (5). A large rectangular housing (2) is shown above the unit. A control panel (3) is shown to the right, with a power cord (19) and a control knob (10). A control panel (4) is shown below the main unit. A control panel (5) is shown to the right of the main unit. A control panel (6) is shown below the main unit. A control panel (7) is shown to the right of the main unit. A control panel (8) is shown below the main unit. A control panel (9) is shown to the right of the main unit. A control panel (10) is shown below the main unit. A control panel (11) is shown to the right of the main unit. A control panel (12) is shown below the main unit. A control panel (13) is shown to the right of the main unit. A control panel (14) is shown below the main unit. A control panel (15) is shown to the right of the main unit. A control panel (16) is shown below the main unit. A control panel (17) is shown to the right of the main unit. A control panel (18) is shown below the main unit. A control panel (19) is shown to the right of the main unit. A control panel (20) is shown below the main unit. A control panel (21) is shown to the right of the main unit. A control panel (22) is shown below the main unit. A control panel (23) is shown to the right of the main unit. A control panel (24) is shown below the main unit. A control panel (25) is shown to the right of the main unit. A control panel (26) is shown below the main unit. A control panel (27) is shown to the right of the main unit. A control panel (28) is shown below the main unit. A control panel (29) is shown to the right of the main unit. A control panel (30) is shown below the main unit. A control panel (31) is shown to the right of the main unit. A control panel (32) is shown below the main unit. A control panel (33) is shown to the right of the main unit. A control panel (34) is shown below the main unit. A control panel (35) is shown to the right of the main unit. A control panel (36) is shown below the main unit. A control panel (37) is shown to the right of the main unit. A control panel (38) is shown below the main unit. A control panel (39) is shown to the right of the main unit. A control panel (40) is shown below the main unit. A control panel (41) is shown to the right of the main unit. A control panel (42) is shown below the main unit. A control panel (43) is shown to the right of the main unit. A control panel (44) is shown below the main unit. A control panel (45) is shown to the right of the main unit. A control panel (46) is shown below the main unit. A control panel (47) is shown to the right of the main unit. A control panel (48) is shown below the main unit. A control panel (49) is shown to the right of the main unit. A control panel (50) is shown below the main unit. A control panel (51) is shown to the right of the main unit. A control panel (52) is shown below the main unit. A control panel (53) is shown to the right of the main unit. A control panel (54) is shown below the main unit. A control panel (55) is shown to the right of the main unit. A control panel (56) is shown below the main unit. A control panel (57) is shown to the right of the main unit. A control panel (58) is shown below the main unit. A control panel (59) is shown to the right of the main unit. A control panel (60) is shown below the main unit. A control panel (61) is shown to the right of the main unit. A control panel (62) is shown below the main unit. A control panel (63) is shown to the right of the main unit. A control panel (64) is shown below the main unit. A control panel (65) is shown to the right of the main unit. A control panel (66) is shown below the main unit. A control panel (67) is shown to the right of the main unit. A control panel (68) is shown below the main unit. A control panel (69) is shown to the right of the main unit. A control panel (70) is shown below the main unit. A control panel (71) is shown to the right of the main unit. A control panel (72) is shown below the main unit. A control panel (73) is shown to the right of the main unit. A control panel (74) is shown below the main unit.

REPLACEMENT PARTS (continued)

Item	Part No.	Description	Qty.
1	0021042	Top Housing Assy.	1
2	0100180	Generator Manifold	1
3	0200121	O-Ring	1
4	0010336	Drip Tray Assy.	1
5	0100179	Generator, 3800W (240V)	1
	0100259	Generator, 3000W (240V) (Mfg. No. 9100218 only)	
6	2020104	Drain Tube	1
7	040K103	Insulation Kit	1
8	0501139	Retainer, Generator	2
9	001K125	Lock Lever and Support Assy.	1
10	2100138	Ball Knob	1
11	0021044	Lever Support	1
12	2190102	Teflon Tube 4 1/2"	1
13	200K126	Generator Tube Kit	1
14	0020419	Solenoid Valve with Fittings	1
15	200K127	Inlet Tube Kit	1
16	208K106	Quick Disconnect Body	1
17	7000139	Quick Disconnect Insert	1
18	0010584	Inlet Hose Assy. with Strainer	1
19	0700452	Power Cord 6-20P (Mfg. No. 9100210, 220, & 230)	1
	0700453	Power Cord CEE 7/7 Mfg. No. 9100212 & 222)	1
	0700437	Power Cord IEC-309 (Mfg 9100224)	1
	0700556	Power Cord UK BS 1363 250 V, 13 A (Mfg. No. 9100218)	1
20	210K230	Leg Kit (Qty. 4)	1
21	0020443	Base	1
22	4050170	Pot. and Low Voltage Wiring Harness	1
23	4020131	Audio Signal	1
24	1000955	Label, Control Panel	1
25	210K122	Adjustable Leg Kit (Qty. 4) (Incl. No. 26)	1
26	210K108	Rubber Tip Kit (Qty. 4)	1
27	4010137	Rocker Switch, Power On/Off	1

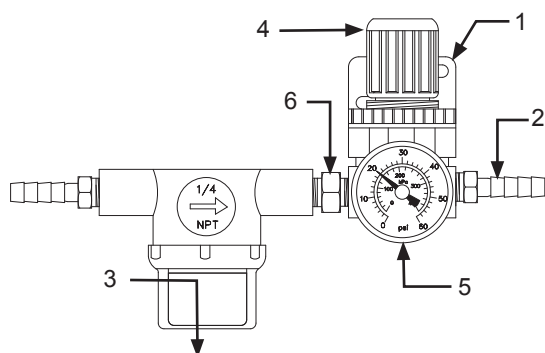
Item	Part No.	Description	Qty.
28	2100123	Adjusting Knob	1
29	4010166	Switch, Operate	1
30	4060208	LED Light, Yellow (Steam)	1
31	4060179	LED Light, Green (Ready)	1
32	0021043	Control Panel	1
33	402K169	Solid State Control	1
34	403K157	Thermostat	1
35	4030162	Hi-limit Thermostat	1
36	0021046	Main Housing	1
37	0020269	Spray Tube	1
38	0500625	Diffuser	1
39	2100119	Large Basket Handle	1
40	2100240	Handle Guard, Black	1
42	2100107	Small Basket Handle	1
43	0010550	Large Basket Assy. 20 oz.	1
44	0010551	Small Basket Assy. 10 oz.	2
45	0010570	Rice Basket Assy. 10 oz.(not shown)	2
46	001K717	Egg Poach Basket Kit (not shown)	2
47	0700523	Wire Set (not shown)	1
48	2140116	Petrol Gel (not shown)	1
49	4060304	Terminal Block	1
50	306P104*	Screw, Truss Hd., #6-32 x 1/4" SS	1
51	325P109*	Bolt, Hex Hd., 1/4-20 x 1/2"	1
52	325P134*	Setscrew, 1/4-20 x 3/4"	1
53	308P115*	Screw, Pan Hd., #8-32 x 3/8" SS	1
54	040P112*	Strain Relief	1
55	308P143*	Nut, Hex, KEPS, #8-32	1
56	310P109*	Screw, Pan Hd., #10-32 x 3/8" SS	1
57	306P113*	Screw, Round Hd., #6-32 x 5/8"	1
58	306P116*	Nut, Hex, #6-32	1
59	308P103*	Screw, Truss Hd., #8-32 x 1/4" SS	1
60	308P128*	Screw, Binder Hd., Brass, #8-32 x 1/4"	1
61	020P117*	O-Ring, 5/16" I.D.	1
62	308P110*	Screw, Binder Hd., Nickel, #8-32 x 5/16"	1
63	338P102*	Bolt, Carriage, 3/8-16 x 3/4" SS	1

REPLACEMENT PARTS (continued)

Item	Part No.	Description	Qty.
64	040P111	Snap Bushing	1
65	325P104*	Flat Washer 1/4"	1
66	0503989	Bracket, Hi-Limit	1
67	See page 13 for Strainer Parts identification		
68	325P169*	Bolt, Shoulder 5/16" x 1/2"	1

Item	Part No.	Description	Qty.
69	212P120*	Spacer, St. Stl.	1
70	212P118*	Flat, Washer St. Stl.	1
71	325P154*	Wash, 1/4" Spring Lock	1
72	325P102*	Nut, Hex 1/4" - 20	1
73	0021051	Lock Lever Weldment	1

Water Pressure Regulator Kit - Part No. 7000314



Item	Part No.	Description	Qty.
1	0503849	Bracket	1
2	2040130	Male Adapter, Barbed 1/4"	2
3	See page 14 for Strainer Parts identification		
4	2170113	Regulator, Pressure	1
5	2170114	Gauge, Water Pressure	1
6	2190129	Nipple, 1/4" NPT x 1/4" NPT	1
7	2110104	Clamp, worm drive (not shown)	2

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This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a template for writing or drawing. The margins are consistent on all sides.

LIMITED WARRANTY

Equipment manufactured by Roundup Food Equipment Division of A.J. Antunes & Co. has been constructed of the finest materials available and manufactured to high quality standards. These units are warranted to be free from mechanical and electrical defects for a period of one year from date of purchase or 18 months from shipment from factory, whichever occurs first, under normal use and service, and when installed in accordance with manufacturer's recommendations.

To insure continued proper operation of the units, follow the maintenance procedure outlined in the Owner's Manual.

1. This warranty does not cover cost of installation, defects caused by improper storage or handling prior to placing of the Equipment. This warranty does not include overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the Equipment. This warranty does not cover consumable items such as the Platen, Release Sheets, Conveyor Belt Wraps, gaskets, O-rings, light bulbs, nor does it cover water contaminant problems such as foreign material in water lines or inside solenoid valves. It does not cover water pressure problems. **This warranty does not pay travel, mileage, or any other charges for an Authorized Service Agency to reach the equipment location.**
2. Roundup reserves the right to make changes in design or add any improvements on any product. The right is always reserved to modify equipment because of factors beyond our control and government regulations. Changes to update equipment do not constitute a warranty charge.
3. If shipment is damaged in transit, the purchaser should make a claim directly upon the carrier. Careful inspection should be made of the shipment as soon as it arrives and visible damage should be noted upon the carrier's receipt. Damage should be reported to the carrier. This damage is not covered under this warranty.
4. Warranty charges do not include freight or foreign, excise, municipal or other sales or use taxes. All such freight and taxes are the responsibility of the purchaser.
5. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL ROUNDUP BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.



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